Pierce County

Public Works and Utilities
Sewer Utility

State of Washington
Capital Projects Advisory Review Board (CPARB)
Project Review Committee (PRC)

APPLICATION FOR PROJECT APPROVAL

TO USE THE
GENERAL CONTRACTOR/CONSTRUCTION MANAGER (GC/CM)
CONTRACTING PROCEDURE

SUBMITTED BY:

PIERCE COUNTY PUBLIC WORKS AND UTILITIES
SEWER UTILITY

PROJECT:

CHAMBERS CREEK REGIONAL WASTEWATER TREATMENT PLANT EXPANSION

The CPARB PRC will only consider complete applications: Incomplete applications may result in delay of action on your application. Responses to Questions 1-8 and 10 should not exceed 20 pages (font size 11 or larger). Provide no more than six sketches, diagrams or drawings under Question 9.

1. Identification of Applicant

(a) Legal name of Public Body (your organization):
Pierce County Public Works and Utilities – Sewer Utility
(b) Address: 9850 64th Street West, University Place, WA 98467-1078
(c) Contact Person Name: Ryan Dooley, P.E. Title: Engineering Supervisor
(d) Phone Number: (253) 798 - 4280 or (253) 798 - 2281
(e) Fax: (253) 798 - 2570 E-mail: ryan.dooley@co.pierce.wa.us

2. Brief Description of Proposed Project

Please describe the project in no more than two short paragraphs.

Pierce County Public Works & Utilities - Sewer Utility plans to make major improvements to Chambers Creek Regional Wastewater Treatment Plant (CCRWWTP). Currently, the CCRWWTP provides wastewater treatment to residential, commercial and industrial customers within the cities of Tacoma, Lakewood, University Place, Dupont, Steilacoom, and parts of unincorporated Pierce County. The goal of these improvements is to increase the plant's capacity, provide the flexibility for a higher level of treatment, preservation of existing equipment, expansion of existing facilities, and allow the plant to comply with future National Pollutant Discharge Elimination (NPDES) permit requirements.

The Wastewater Treatment Plant Expansion Project includes adding capacity to the liquids stream, solids stabilization, repurposing of existing spaces for storage, and office spaces; construction of a new utilidor; upgrading existing electrical system; and expanding the plant's Supervisory Control and Data Acquisition (SCADA) system. Liquids stream improvements include construction of four large treatment trains capable of providing nitrification/denitrification, replacement of low pressure aeration blowers which are at the end of their useful life, construction of a Secondary Clarifier, construction of a side treatment facility for recycled wastewater streams, construction of odor control facilities, and construction of new chemical containment facilities. Solids thickening improvements includes replacing all existing gravity belt thickeners (GBT) with four rotating drum thickeners (RDT). A new facility will be constructed capable of housing up to six RDTs to accommodate future capacity expansions. Improvements to solids stabilization include construction of two Digesters and a Digester Control Building. Currently, an $11 million Design-Bid-Build contract is underway to prepare the site for the expansion. This work includes site grading, pre-loading of a 45 acre area for the expansion, landscaping, security fencing, and a perimeter access road. This contract is scheduled for completion in October 2011.

3. Projected Total Cost for the Project:

A. Project Budget

Costs for Professional Services (A/E, Legal etc.)	$21,120,000
Estimated project construction costs (including construction contingencies):	$138,560,000
Equipment and furnishing costs	$45,200,000
Off-site costs	$4,930,000
Contract administration costs (Owner, CM etc)	$11,650,000
Contingencies (design & owner)	$19,370,000
Other related project costs (briefly describe)	

Sales Tax	$17,090,000
Total	$257,920,000

B. Funding Status:
Please describe the funding status for the whole project.

The Sewer Utility's financial plan is identified in Chapter 10 of the Chambers Creek Regional Wastewater Treatment Plant Facilities Plan (Plan), November 2010. The Plan was developed to fund the capital projects identified in the 2009-2014 Capital Facilities Plan, including the Wastewater Treatment Plant (WWTP) Expansion improvements. The Plan calls for the issuance of three revenue bond issuances (2010, 2012 and 2014) estimated to total $230 to $300 million and the utilization of Sewer Utility's capital reserve funds ($33.6 million as of December 31, 2010) to finance the capital improvement projects. The first revenue bond was issued in October 2010, totaling $61 million. Proceeds from this first bond are to be distributed as follows: $50 million for capital projects, $3.6 million for debt service reserve and $7.5 million to refinance an outstanding revenue bond. Debt coverage for the bonds will be paid though double digit sewer rate increases, 2010 through 2013, and user connection charges. The Pierce County Council has adopted 15.3% rate increases in both 2010 and 2011 and has shown support for the future rate increases. The Sewer Utility is also pursuing Environmental Protection Agency (EPA) and Washington State Department of Ecology (WSDOE) grant/loan funding for the WWTP water quality improvements; however, these funds would only reduce the overall bond proceeds necessary and would in turn decrease projected sewer rate increases.

4. Anticipated Project Design and Construction Schedule:
Please provide:

Chambers Creek Expansion Anticipated Milestones	**Date**
Start Preliminary Design	November 2009
PRC GC/CM Project Application, Presentation, and Decision	March 2011
Advertise for GCCM	April 2011
Award GCCM Preconstruction Contract	August 2011
Complete Preliminary Engineering and Submit Preliminary Design Report	May 2011
90 Percent Design Submittal	June 2013
Negotiate MACC and Sign Construction Contract	July 2013
Complete Construction Documents	October 2013
Begin Construction *	November 2013
Commissioning and Startup	June 2016

*Note: Project might be phased to allow an early construction start in December 2012.

5. Why the GC/CM Contracting Procedure is Appropriate for this Project
Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

- If implementation of the project involves complex scheduling, phasing, or coordination, what are the complexities?

For planning purposes, the plant expansion has been divided into three major components: Liquids Stream and Solids Stream and non-process components. Each stream by itself would require a lengthy construction period for equipment to be procured and delivered, for facilities to be constructed, for electrical and hydraulic systems to be updated, and finally for connections between both streams to be completed. Each process stream by itself would require up to 30 months to construct resulting in a total construction phase of up to five years, if one stream is built first and then the other. In addition, all process streams and non process components, like support facilities, are in close proximity to each other and other existing facilities, thereby dramatically increasing the risk for potential conflicts and disputes if both streams were to be built in parallel. Based on the potential construction lengths and site restrictions it would seem impractical to use the conventional design-bid-build for this expansion project.

The advantage of using a GC/CM contracting approach is that it would allow the involvement of the contractor early during design with the intent of identifying and minimizing construction conflicts and leading the way to a more efficient phasing approach, centralized site management, and the successful coordination of commissioning of both process streams and the non-process buildings. Under the guidance of a single contractor, project delivery could be expedited with fewer disruptions resulting in project cost savings.

- If the project involves construction at an existing facility that must continue to operate during construction, what are the operational impacts on occupants that must be addressed? *Note: Please identify functions within the existing facility which require relocation during construction and how construction sequencing will affect them. As part of your response you may refer to the drawings or sketches that you provide under Question 9.*

  The CCRWWTP provides wastewater treatment to residential, commercial, and industrial customers within the cities of Tacoma, Lakewood, University Place, Dupont, Steilacoom, and parts of unincorporated Pierce County. The plant operates 24hours a day, 365 days a year receiving an average of 18.9 million gallons/day (MGD) with peak flows up to 53MGD. During all conditions, wastewater must be able to flow unimpeded through the plant. It is imperative that the plant be fully operational at all times and under all conditions, in order to provide treatment in compliance with DOE's NPDES discharge permit for all incoming flow. Any shutdown of the plant would require finding temporary storage for all incoming wastewater. Even with extensive planning and advance scheduling, any plant shutdowns can only be executed for short durations otherwise there is a high risk of discharging untreated wastewater into Puget Sound.

  Due to the plant's unique constraints, any construction in or around the plant would require complex construction sequencing. Therefore, early involvement of the GC/CM in the sequence planning process is crucial. For it provides an opportunity for the plant staff and the designer to develop a construction plan that will allow the plant to be fully operational and continue effectively processing all wastewater it receives.

- If involvement of the GC/CM is critical during the design phase, why is this involvement critical?

  As previously stated, this project requires the GC/CM's participation during the design phase due to the complexity of construction sequencing, the need for continued operation of the plant during construction, and timely equipment procurement and delivery.

The wastewater treatment plant must be in operation at all times during construction to maintain compliance with NPDES discharge requirements. During the design phase the GC/CM will work with the design team and facility operations staff in a collaborative approach to develop scenarios for phasing construction that minimizes or mitigates all impacts to the existing plant's operation. The contractor will need a complete understanding of the plant's operational systems which can only come from being intrinsically involved in the design process. This type of approach is not a normal element of conventional design-bid-build delivery.

The project also entails the procurement and delivery of specialized and complex pieces of equipment with lengthy lead times for fabrication. For the project to remain on schedule, the GC/CM will need to work with the designer and facility operations staff to determine all equipment requirements. This information will facilitate early equipment selection and procurement. It also allows the design documents to be tailored to the selected equipment thereby minimizing redesign costs and improving construction coordination.

- If the project encompasses a complex or technical work environment, what is this environment?

  The CCRWWTP maintains a number of processes where temperature, biological, and chemical balances must be controlled and maintained even under critical conditions. These processes must be understood early on by the GC/CM to better develop the best methods of staging for this project even under all types of conditions. This facility is consistently and continuously subjected to fluctuations in the quantity and quality of influent wastewater due to seasonal variations and storm events.

  Early involvement of the GC/CM will help minimize and/or mitigate any disruptions to these crucial operations and potentially reduce changes during the construction phase.

- If the project requires specialized work on a building that has historical significance, why is the building of historical significance and what is the specialized work that must be done?

  The project does not involve work on buildings with historical significance.

6. Public Benefit

In addition to the above information, please provide information on how use of the GC/CM contracting procedure will serve the public interest. For example, your description must address, but is not limited to:

- How this contracting method provides a substantial fiscal benefit; or
- How the use of the traditional method of awarding contracts in a lump sum (the "design-bid-build method") is not practical for meeting desired quality standards or delivery schedules.

The Wastewater Treatment Plant expansion is a highly technical project with significant public and environmental risks. It is considered an essential facility that must be in operation at all times otherwise there's a high risk of discharging untreated wastewater into the Puget Sound. The GC/CM process gives the County the flexibility to select the most qualified contractor with experience working in or around critical facilities and will also provide the County with the best value for the project rather than selecting a contractor based solely on the lowest bid. The GC/CM will be selected and brought on board early during the design

phase of the project to help minimize risk to the public and the environment. Some other public benefits include:

- The GC/CM process allows subcontracting bidding options that will be beneficial to this project, such as prequalification of subcontractors, early selection of subcontractors, and the selection of mechanical and/or electrical subcontractors during design to participate in preconstruction services. The Sewer Utility, along with the GC/CM, will consider these subcontract options and take advantage of the options that will provide the greatest benefit to the public.

- The GC/CM process allows for the contractor to be actively involved in developing a construction phasing plan with the collaboration of the designer and facility operations staff during the design phase of the project. Due to the size and complexity of the expansion, a detailed construction plan is needed to minimize impacts to the plant's daily operation. The GC/CM's direct involvement will help in identifying and reducing potential construction issues and conflicts early in the project and assist with the development of a more efficient construction sequencing. These efficiencies support better management of the construction process which translates into reduced claims risk, increased cost savings to the public, and reduced overall construction duration.

- Using the GC/CM process will provide an opportunity to select and procure long lead time equipment earlier in the design phase instead of waiting until the final construction documents are completed. In addition, it will provide an opportunity to optimize the project design based on selected equipment. This will benefit the public by reducing the overall construction duration of the project.

- The GC/CM process allows the contractor to provide estimating services during the design process, participate in Value Engineering (VE) and constructability studies, and provide cost trend analysis; thus keeping the project within budget during design and minimizing cost overruns.

- The GC/CM process enables price competition on all construction subcontracts, which takes advantage of competitive pricing in the marketplace. The GC/CM will likely generate greater interest from subcontractor bidders by utilizing local contacts and relationships in the subcontractor community to encourage competition.

Delivering this project by conventional means is possible. However, there is a significant risk of claims resulting from the construction phasing of this complex project. The project's success primarily rests on the collaboration of the owner, designer, and GC/CM to work together during the design phase to minimize construction conflicts and risks during construction.

7. Public Body Qualifications

Please provide:

- (A) A description of your organization's qualifications to use the GC/CM contracting procedure.

  Since its inception in 1970, the Sewer Utility has been conducting and managing major construction projects using in-house resources supplemented by outside consultants. Many of these projects range in cost from a few hundred thousand to several million and vary from

equipment replacement projects to construction of new facilities. Currently, the Sewer Utility has several licensed engineers on staff with facilities construction experience.

The county has used the GC/CM process once for construction of a new correctional facility. The Sewer Utility intends to use the same Budget and Finance, Prosecuting Office, and Contract Compliance Departments that were used for the first Pierce County GC/CM contract. Due to the uniqueness of the GC/CM delivery process, the Sewer Utility has hired Landon Project Management Group as a GC/CM project consultant for the duration of the project. The Sewer Utility will also be hiring a Construction Management (CM) Firm with GC/CM experience to facilitate in the management of the project. The CM Firm shall be required to have experience in construction project management for the design and construction of wastewater facilities of similar size and complexity. Even though the County has used the GC/CM process once and is limited in experience in this area, the County has the flexibility to dedicate additional staff and hire the necessary advisors and experts with GC/CM experience to support the GC/CM approach.

The Sewer Utility has added John Salmon, Pierce County Deputy Prosecuting Attorney, to work with the project team providing legal counsel. John Salmon has previous experience working on GC/CM contracts for Washington State University. In addition, he will have access to outside specialty legal services as needed.

Pierce County Public Works and Utilities together with its consultants and internal staff are currently developing procedures and implementing plans to ensure the successful completion of this project. In the event that additional assistance is required, the County is prepared to hire additional GC/CM support or amend existing contracts to supplement areas that are insufficient.

- (B) A *Project* organizational chart, showing all existing or planned staff and consultant roles. *Note: The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Attachment C for an example.)*

  The organizational chart (See Attachment A) provides a summary of the organizational structure for key positions. Key staff and consultant involvement are indicated. Also included is a chart listing the project team members and anticipated level of involvement throughout the GC/CM Procurement, Preconstruction Phase, and Construction Phase (See Attachment A).

- (C) Staff and consultant short biographies (not complete résumés).

  Tim Ramsaur, P.E. – Public Works and Utilities Sewer/Water Utility Manager
  Role: General Project Oversight.
  Relevant Experience: Tim has over 30 years of progressive experience in engineering and construction management for the public sector. He has worked for the Pierce County Public Works & Utilities department for the past 26 years and as the Wastewater Utility Manager for the last 7 years. Tim's responsibilities include managing a large division composed of multiple sections that include the Wastewater Treatment Plant, Construction & Inspection, Wastewater Utility Engineering, Development Engineering, Wastewater Collections, and Pierce County's Water Utility. The division as a whole had a maintenance and operating budget of $36.7 million and a capital budget of $17.9 million for 2010. Part of Tim's responsibilities include the preparation of the Sewer and Water Utility budget and overseeing the allocation of funds within the appropriate budget areas, making decisions on budget

matters, cost control and monitoring; ensuring County compliance with state and federal regulations; planning capital improvement programs for the division; and coordinating and monitoring programs in accordance with overall County goals and objectives.

Over the last six years Tim has been instrumental in developing the department's project management system. Tim lead development of the current tools and processes used by department staff. Tim also was the Public Works and Utilities team leader in selecting the current Enterprise Management System software used throughout the department.

Karl Imlig, P.E. - Wastewater Utility Engineering Manager
Role: General Project Oversight
Relevant Experience: Karl has over 21 years experience in the public and private sectors as a design and construction manager, city engineer, designer, and project manager. Prior to joining the Pierce County team, Mr. Imlig worked at the City of Olympia for 17 years. During this time he managed the design and construction program for the City. Under his guidance his team of project managers, engineers, technicians, and inspectors completed the Cities yearly Capital Facility Plan, which averaged $15 million per year. A sample of these projects include: City of Olympia City Hall ($42 million), 4th & 5th Avenue Corridor Improvements ($38 million), R/W Johnson /21st Avenue roadway reconstruction ($4 million), 18th Avenue Improvements ($3 million), Westside Infiltration and Inflow Removal ($10 million), Lilly Road Sewer ($4 million) and Drinking Water Reservoirs ($10 million). Mr. Imlig was the project manager during the planning phase for the City of Olympia's $42 million design build City Hall project. Upon selection of a Design Build team he transferred responsibility to another Project Manager to manage the day-to-day activities. Mr. Imlig continued to provide general project oversight.

At Pierce County, as in Olympia, Mr. Imlig provides overall guidance for the various project teams and programs within the Sewer/Water Utilities. Additional responsibilities include the creation of systems for monitoring, controlling, and ensuring delivery of the annual and 6 year Capital Facilities Plan. This included evaluating resource needs, the use of consultants, fiscal management, and directing schedules. The Sewer Utility has refined its project delivery process to take advantage of the tools, skills, and knowledge that exists within the Utility and across the County. The projects that are currently under construction include: Tunnel Rehabilitation ($10 million), B Street Interceptor ($6 million), and Wastewater Treatment Plant Site Perimeter Improvements Development ($11 million).

Ryan Dooley, P.E., PMP, DBIA Associate
Role: WWTP Expansion Project Management Supervisor
Relevant Experience: Ryan has 13 years of professional experience and has worked for the consulting firms of Murray, Smith & Associates, Portland, OR; Skillings-Connolly, Lacey, WA; and has been with Pierce County Public Works and Utilities for 8 years. His work experience includes engineering design, project management, and construction administration for various projects. These projects include: WWTP Site Perimeter Improvements ($11 million), WWTP Expansion Silt Removal ($750,000), Chambers Creek Tunnel Rehabilitation Phase 1 ($3.7 million) and the WWTP Expansion Preliminary design ($5 million). Since 2009, Ryan has managed a team of engineers working on the WWTP Expansion Preliminary Design, and leading them towards the next design and construction phases. This work included the management of the technical design between the treatment plant staff and various design consultants. This work involved the tracking, coordination, documentation, and communication of all issues across all disciplines associated with the Preliminary Engineering. Ryan has been preparing for the expansion by obtaining his certification as a Project Management Professional and becoming a DBIA Associate.

Arnie G. Sheppard, P.E., PMP – Construction Project Manager
Role: Owner's representative providing oversight during construction.
Relevant Experience: Mr. Sheppard has 26 years of progressive experience in engineering and construction management for the public sector. He has worked for the Pierce County Public Works & Utilities department for the past 22 years and has been a construction project manager for the Sewer Utility for the past 8 years. He has managed a variety of construction projects from regular maintenance contracts to construction of new facilities like the Fertilizer Manufacturing Facility completed in 2006. Currently, he's the construction manager for B Street Interceptor - Phase 2 Project, a capitol improvement project, and WWTP Site Perimeter Project, site preparation project for the wastewater treatment plant expansion.

Kip Julin, Strategic Planning and Asset Manager
Role: Support the project through Sewer Utilities Capital Program and sewer financing/rate oversight.
Relevant Experience: Kip has worked for the Sewer Utility for 25 years. He has been involved in the design, bidding, construction and project management of over $250 million of Sewer Utility assets in the capacity of design engineer, project manager and/or capital program manager. Current responsibilities include management of the Utility's strategic long range sewer planning program and capital facility programming.

Amanda Summers, P.E. - Project Manager
Role: Liquids Stream Lead
Relevant Experience: Amanda has over 9 years experience working with public agencies such as Washington State Department of Transportation (WSDOT), Idaho Department of Water Resources, and a private consulting firm Toothman-Orton Engineering. She has worked for the Sewer Utility for the past 3 years where her job responsibilities included completing developer reviews, coordinating sewer construction work with other departments within Pierce County Public Works and Utilities, developing and administering construction documents (plans, specifications and estimate), project bidding, and development of a fee modeling program. She is currently the Project manager for the pilot plant study at the CCRWWTP and the disinfection design contract for the CCRWWTP.

She worked as part of a design team for various projects with WSDOT South Central Region including the I-82 Weigh Station and the SR 24 - I-82 to Keys Road – Additional Lanes in Yakima. She managed all construction materials testing for WSDOT Tacoma Project office from 2004 to 2005 this work included submittal review, developing testing schedules and testing protocols, and reviewing testing for compliance with WSDOT standards. She provided engineering support for the Idaho Department of Water Resources Planning Division. Her worked at Toothman-Orton Engineering included engineering design and development of constructions plans for developer projects, completing engineering reports, master community planning, sewer basin planning, and sewer mainline construction documents (plans and specifications).

Juan Loyola, P.E. – Project Manager
Role: Solids Stream Lead
Relevant Experience: Juan has over 13 years in planning, design, and construction experience working on a variety of engineering projects. From 1997 to 1998, he initially started working as a scoping engineer for Washington State Department of Transportation (WSDOT). Then from 1998 to 1999, Juan served as the lead hydraulic engineer for the

preliminary design of stormwater facilities for the NE 112th Ave/Gher Rd Interchange in Vancouver, Washington. From 1999 to 2005, Juan worked as lead project designer for a variety of preservation and mobilization projects and later as lead structures/civil construction engineer for the SR 509 Port of Tacoma Grade Separation project and HOV projects. In 2005, Juan transferred to Pierce County Public Works and Utilities Stormwater Management (SWM) division as a design and construction engineer for a variety of engineering projects. Finally in 2009, Juan served as a project manager for Engineering Resources Division of Pierce County and is currently assigned as lead project manager for the Solids Stream process under Sewer Utility.

Dennis Fields – Project Manager
Role: Non-Process Buildings Lead
Relevant Experience: Dennis has 17 years in planning, design and project management experience working primarily on water and wastewater projects. Working from 1993- 2003 as a project engineer, process engineer and project manager for Black & Veatch and Jordan, Jones & Goulding, respectively.

Relevant project experience include schematic design of WWTP lab for the City of Sao Paulo, Brazil and Kansas City, Kansas, develop specification and schematic design of odor control facilities for a 25 foot diameter bi-pass wastewater tunnel for the City of Atlanta, sizing and schematic design of a 25 foot diameter bi-pass wastewater tunnel for the City of Atlanta, managing the planning and design of several large (36" diameter +) water pipelines within the City of Atlanta, managing the planning and design of water treatment plant intake pump station improvement for the City of Columbus, GA.

Dennis was the Engineering Projects Manager at Cascade Water Alliance from 2003-2008 where he managed all the consultant contracts; the project team included planner, public relation consultants designer, financial planners, legal, real-estate acquisition and construction managers for the planned Cascade Water Alliance regional pipeline and Water Treatment Plant at Lake Tapps (estimated cost of $950 Million). Additional duties included negotiating consultant contracts, equipment pre-purchasing, negotiating franchises/easement, drafting Cascade change order policy for the construction, presentation of capital program to the Cascade board, etc. The design/construction phase of the project included a design team and construction manager; the construction manager was hired at approximately 50% design and performed constructability, and value engineering.

Dennis has worked as a project engineer for the Pierce County Sewer Utility from 2008 – present where he has been project manager through the design and construction of two projects totaling approximately $10 Million at the WWTP. Duties included consultant management, review of RFIs, submitting owner requested project changes, reviewing contractor propose changes and overall project oversight.

John Salmon - Deputy Prosecuting Attorney, **Pierce County, Washington**.
Role: Legal advisor to Pierce County Public Works and Utilities.
Relevant Experience: As an Assistant Attorney General at Washington State University from 1995 to 2000 John advised Washington State University's (WSU) Facilities Development Department on construction matters including GC/CM projects and was the lead attorney in developing GC/CM contract documents for the WSU. Projects included: ELSB, Scholars Hall, Health Sciences Building, Student Recreation Center and Teaching and Learning Center. John worked in the Transportation and Public Construction Division of the Attorney General's Office from 2001 to 2006. He joined the Pierce County Prosecuting

Attorney's Office in May 2006 where his primary responsibilities are counseling Public Works and Utilities on construction and eminent domain related matters.

Darlene Septelka, DBIA – GC/CM Consultant Project Director/ Project Manager/Procurement Manager (Landon Project Management Group)
Role: Provide strategic GC/CM guidance and advice throughout the project. Lead the GC/CM procurement process and contract development for the Utility. Assist the Utility in the development of GC/CM procedures for the preconstruction, construction, and closeout phases of the Project. Provide GC/CM performance oversight.
Relevant Experience: Darlene is the Director of Project Management Service for Landon and has over 38 years of construction experience. Darlene has over 20 years of experience in guiding Owners in managing their projects under different project delivery methods, including 9 years of experience in managing WA public works projects. Darlene has been actively involved in 7 GC/CM and Design-Build WA State projects governed by RCW Chapter 39.10.

For the past 10 years, Darlene has been actively involved in the WA state legislative process and has served on various committees drafting traditional and alternative contracting language of the RCW. Darlene has also conducted more than 50 national and international professional presentations on integrated project delivery methods and has recently provided two in-house GC/CM training sessions for over 50 City of Seattle Public Utility employees and an in-house Design-Build training session for 30 Port of Seattle employees. Darlene has co-authored two studies for the State of Washington on Design-Build and GC/CM best practices and currently completing an evaluation of all GC/CM projects completed in the State for CPARB.

Darlene has directly managed two GC/CM Washington state projects administered under RCW 39.10:

Brightwater Treatment Plant – Senior Construction Manager working directly for King County
The Brightwater Wastewater Treatment Plant (BWTP) is a $500 million 36MGD treatment plant (secondary treatment membrane bio-reactor (MBR) technology) located on a 110-acre site in Snohomish County. The project complexity included a sophisticated temporary storm water system for a 110-acre site, wetland restoration, exposed 80-acre site and unsuitable soils, dewatering, public relations, and archeological and seismic site concerns.

As the Senior Construction Manager for King County, Darlene was responsible for the development of the project plan for managing construction of the BWTP and implementation of this plan during the construction phase of the project. Project responsibilities included leading the construction team, meeting facilities design requirements, and performing within set schedules and budgets. The Project included managing the $320 million GC/CM contract for the infrastructure and liquid processes. The GC/CM contract was negotiated in five phases with more than 35 GC/CM subcontracts. The MEP subcontracts were more than $135 million in value. The GC/CM contract included a $2 million preconstruction services contract and $25 million in negotiated support services. The solid processes ($165 million) was packaged and competitively bid out by King County.

Under Darlene's supervision, the GC/CM Preconstruction phase was successfully completed and five GC/CM Contract Amendments where successfully negotiated.

Construction of Phase 1 and 2 of the GC/CM Contract was completed under the budget and on schedule. Phase 1 and 2 construction work included environmental and hazardous remediation of a 110-acre site, archeology monitoring, building site preparation, including excavation; subgrade preparation and installation of the 84-, 66-, 48-, and 30-inch yard piping; installation of a site storm water containment system; renovation of the Stockpot Facility into the Operations Center, and building a 40-acre park/wetlands restoring salmon habitat. Darlene was responsible for the interdisciplinary coordination between the conveyance system and the treatment facility construction and the successful installation of the Effluent Drop Structure connecting the Treatment Plant to the Conveyance System.

City of Lynnwood Recreation Renovation and Expansion Project – Senior Project Manager for the City of Lynnwood
This GC/CM project is a $25 million complex renovation of an existing aquatic facility and the addition of three indoor pools. The project complexities included dewatering and remediation challenges, sophisticated mechanical and chemical pool systems, and complex natatorium HVAC systems. Darlene has managed the project for the City from procurement, through design and contraction. Darlene was also responsible for leading GC/CM procurement and contract development, including leading preconstruction and MACC negotiations for the City. The Project is currently in the commissioning and closeout phase and is under budget and ahead of schedule and on track to achieve a LEED Silver rating.

Darlene has also provided alternative procurement assistance on three WA GC/CM project and three WA Design/Build project. Darlene has just completed writing the GC/CM procurement and contract documents for the City of Seattle's $35 Million Windermere Combined Sewer Overflow (CSO) Reduction project and guiding Seattle Public Utilities through the GC/CM procurement process. The Windermere Project is 2.05 MG underground CSO storage tank (approximately 125 ft x 185 ft x 30 ft deep) with an automated flushing water system, submersible pumps, and valves and X miles of conveyance system of approximately 2,250 linear feet of 30-inch diameter sewer line and 2,250 linear feet of 10-inch diameter force main. Darlene also led the GC/CM procurement and developed the contract documents on the $40 Lake Chelan Community Hospital Replacement Project.

Dave Oskamp – GC/CM Consultant Construction Manager (Landon Project Management Group)
Role: Provide strategic GC/CM guidance and advice during preconstruction and construction. Support the Utility in providing construction management oversight including reviewing and evaluation of GC/CM performance and negotiating contract changes. Assist the Utility in reviewing GC/CM deliverable including subcontract plan and subcontract package reviews.
Relevant Experience: Dave Oskamp is a Senior Construction Manager for Landon and has over 36 years of construction experience. Dave is currently the City of Lynnwood's Construction Manager administering the GC/CM Contract for Recreation Center and Expansion Project on site during construction for the City. The Project is currently in the commissioning and closeout phase and is under budget and ahead of schedule and on track to achieve a LEED Silver rating and occupancy March 2011.

Dave has managed projects for both public and private owners. His project experience includes commercial, industrial facilities, wastewater, and aviation projects. Dave is fully proficient in all phases of project management from pre-construction services and estimating, to project close-out. Dave is experienced in conceptual and hard bid estimating, fast-track,

and turnkey projects and is skilled and experienced as project manager in formulation of project concepts, design development, preparation of construction documents, bid solicitation and evaluation, management and close-out of construction contracts. Dave has extensive experience coordinating and scheduling construction activities around continual operations of existing facilities.

Dave's contractor experience includes the King County Renton Sewage Plant - Phase V Project where he acted as the Contractor's representative to the owner and designer. Dave was responsible for the project estimate from quantity take-off through subcontractor bid analysis and bid submission. Dave performed project buyout for all major subcontractors and suppliers. Dave prepared and updated the project master schedule for the project and prepared, submitted, and negotiated project change orders.

Tony Morris, PMP – GC/CM Consultant Project Controls Manager (Jacobs – Subconsultant to Landon)
Role: Provide project management strategic planning and GC/CM project controls guidance. Support the Utility in scheduling and estimating reviews and GC/CM Contract change analysis and cost evaluation.
Relevant Experience: Tony serves as a Senior Program Manager for the Jacobs North American Infrastructure Group in Bellevue, Washington. He has over 28 years experience in program and project management, project controls, and construction management for both public and private sector projects; and has worked for both owners and consultants. He is experienced in the full spectrum of project controls for engineering, procurement, and construction and has worked on some of the largest public works programs in the Puget Sound Region, including the King County/Metro Wastewater CIP Program.

Tony was the Project Controls Manager on the BWTP GC/CM project. He was responsible for all project control functions on the $500 million treatment plant construction project including development of construction management policies and procedures, implementation of management and reporting systems, staff training, cost and schedule control and monthly progress reporting.

Tony Morris is currently serving as Program Controls Manager for the Port of Seattle's Consolidated Rental Car Facility GC/CM Program. He leads a team that is providing cost control, scheduling and estimating on the $419M rental car facility that includes the main parking structure, a bus maintenance facility, and main terminal and roadway improvements.

Prior to the BWTP project, Tony Morris was the Program Controls Manager on the $543 million West Point Treatment Plant Secondary Expansion Program where he was responsible for all project control functions for the highly-visible, consent decree mandated program. His responsibilities included budgeting/cost control, program and project scheduling, estimating, contract administration and internal and external progress reporting.

The West Point program involved the implementation of over 10 major construction projects ranging in value from $25 million to over $100 million and over 30 owner-furnished procurement contracts with a total value of over $60 million. Other key features of the program included upgrading an operating facility without unplanned interruptions, stringent environmental permitting and monitoring, significant government (Metro/King County Council, Washington State Department of Ecology) and citizen oversight. Tony also participated in program planning, contract packaging, constructability reviews and

preconstruction planning and partnering efforts. This program was completed on schedule and under budget.

Chris Cleveland, P.E. – Principal in Charge Brown and Caldwell (B&C)
Relevant Experience: Chris is a vice president with 25 years experience in the municipal utility industry. He has proven skills in dealing with complex issues, utility management, and development of comprehensive capital planning and engineering efforts. He has been involved with the planning, permitting and development of the Chambers Creek Wastewater Treatment Plant since 1990. These include several major improvements such as the aeration basin modifications, new biosolids drying facility, digester improvements, headworks and odor control upgrade. From 1990-1995 he was also a lead engineer for the King County South Plant Enlargement III to expand the plant from 62 to 115 MGD. This $200M plant expansion effectively modified the entire plant including: headworks and primary treatment areas, secondary treatment, solids handling, and gas management systems.

His reclaimed water program and project engineering experience covers most of the western U.S. including Arizona, Idaho, Hawaii, and Washington. Perhaps one of his most notable endeavors was his leadership from the planning through implementation of the LOTT Clean Water Alliance (cities of Lacey, Olympia, and Tumwater and Thurston County) Wastewater Resource Management Plan, This included a $50M installation of a satellite treatment plant and groundwater recharge facility. Recent activities have also included the LOTT Budd Inlet Process Improvements Project Program Management.

Jeff Morgan, P.E. –Project Manager (B&C)
Relevant Experience: Jeff has 24 years experience in the planning, design, and construction of wastewater treatment plants. From 1991 to 1994, he served as project engineer for the design and construction of secondary treatment systems at LOTT's 55 MGD (peak) Budd Inlet Treatment Plant. In 2000 to 2002, Jeff was the primary author of the Facilities Plan for Tacoma's Central Treatment Plant, approval of which led to the design and construction of a plant expansion of the 60-MGD maximum month/150-MGD peak flow facility to incorporate ballasted sedimentation to treat peak flows while bypassing the secondary process and still meeting permit limits. In 2006-2007, he was project manager for the design of the $20 million Shelton Regional Water Reclamation Facility. Most recently he served as BC's project manager for construction services for the $10 million plant upgrade at Pierce County's CCRWWTP and is currently the assistant Project Manager for the preliminary design of the CCRWWTP Upgrade.

Thomas Thramer, P.E. – Design Production Manager (B&C)
Relevant Experience: Tom has 32 years experience in engineering and project management for the wastewater treatment, pulp and paper, and chemical industries. He has been involved in all phases of engineering including project scoping and estimating, conceptual design, detail design, project management, construction engineering, and plant engineering. In addition, Tom has worked on the owner's side as a staff engineer and in plant operations.

As a Design Manager on the BWTP Design project, Tom's responsibilities included design planning, design management, coordination between design firms, QA/QC, and budget and schedule management. The BWTP Design project scope included the design of the following process facilities associated with the BWTP: headworks, grit removal, primary clarification, primary effluent screening, digestion, the energy island, and the influent pump station. In addition to completing the facility designs, Brown and Caldwell also functioned as the

discipline design lead for the overall plant process mechanical, electrical, and I&C design; as well as AutoCAD production efforts.

Zimri Moore, P.E. – Chief Project Engineer (B&C)
Relevant Experience: Zimri is a Brown and Caldwell project engineer with 25 years of engineering experience working extensively in water treatment, wastewater treatment, water reclamation, construction management, facilities planning, and hydraulic analysis. Mr. Moore's expertise is in the development and implementation of cost-effective design solutions for water and wastewater treatment facilities. He also has significant experience providing construction management services.

As a process mechanical design leader for the BWTP, Zimri developed mechanical design standards, drawing standards, and specification writing guide used as guidance documents for the project team. He coordinated the hydraulic profile, process performance, discharge permit compliance, and code compliance for treatment process facilities, as well as developed the flow-splitting methodology for operation of conventional primary clarifiers as chemically enhanced primary clarifiers during peak flow conditions. The flow-splitting scheme allows King County Department of Natural Resources and Parks (KCDNRP) to blend wastewater from different treatment processes. The blending strategy will enable KCDNRP to meet discharge permit limits at peak flow conditions, produce exceptionally high quality effluent, and minimize capital costs for the project. Zimri was also the Project Manager for services during construction. He managed engineering support services during construction of $500 million dollar BWTP and managed a multidisciplinary team responsible for submittal and RFI response.

Eric deMontigny – Assistant Project Manager (Principal Subconsultant: Kennedy/Jenks (J/K))
Relevant Experience: Eric has over 27 years of consulting engineering and construction management experience, with the last 19 years focused on the planning, design, construction, and start-up of environmental and wastewater projects. He is currently serving as K/J's Project Manager for the preliminary design of the Pierce County (CCRWWTP) expansion project. Since 2006, Eric also has been involved in more than 10 other improvement projects at the CCRWWTP. His experience with alternative project delivery approaches includes: the City of Fillmore, CA Water Recycling Facility Design-Build-Operate (DBO) project (Project Engineer – influent screening, pumping, and flow equalization); the City of Quincy, WA Domestic Water Reclamation Plant and Industrial Wastewater Treatment Plant DBO projects with $20 million in improvements (Startup and Commissioning Engineer 2001, Project Manager and Engineer 2004); and the $20 million Lockheed Martin Burbank, CA Vapor Extraction System CM-at risk project (Construction Manager). Eric also has experience with value engineering, including studies for Pendleton, OR WWTP and the North Clark Sewer Regionalization (Battle Ground, La Center, and Ridgefield, WA). Another relevant project includes the $35 million City of Arlington WWTP Expansion, for which he prepared the membrane bioreactor equipment procurement documents (pre-selection, negotiation and assignment), prepared the construction quality assurance plan, and performed interdisciplinary quality control review of the plans and specifications. Other recent interdisciplinary reviews have included the Pendleton, OR WWTP, the Dundee, OR WWTP, the Hermiston, OR Recycled Water Plant, and the Burbank, CA Water Reclamation Facility.

- (D) Provide the ***experience <u>and role</u> on previous WA GC/CM or similar projects delivered under RCW 39.10*** for each staff member or consultant in key positions on the proposed project.

  See attachment B.

- (E) The qualifications of the existing or planned project manager and consultants.

  Ryan Dooley will be the Project Manager for this GC/CM contract. He has 13 years of professional experience and has worked for the private consulting firms of Murray, Smith & Associates, Skillings-Connolly, and has been with Pierce County Public Works and Utilities for 8 years. As a Public Works and Utility Sewer Utility Engineering Supervisor (Civil Engineer 3), Ryan has managed small and large projects from the planning phase to construction, providing guidance and direction to the projects development. His work experience includes engineering design, project management, and construction administration for various projects. Throughout each of these projects Ryan has managed risk, and prepared the change management documents. These projects include: WWTP Site Perimeter Improvements ($11 million), WWTP Expansion Silt Removal ($750,000), Chambers Creek Tunnel Rehabilitation Phase 1 ($3.7 million) and the WWTP Expansion Preliminary design ($5 million). Since 2009, Ryan has managed a team of engineers working on the WWTP Expansion Preliminary Design, and leading them towards the next design and construction phases. This work included the management of the technical design between the treatment plant staff and various design consultants. This work involved the tracking, coordination, documentation, and communication of all issues across all disciplines associated with the Preliminary Engineering. Ryan has been preparing for the expansion by obtaining his certification as a Project Management Professional and becoming a DBIA Associate.

  Tim Ramsaur and Karl Imlig will also provide general oversight and support to Ryan and his team to ensure that this project is successful.

  In the event that additional assistance is required, the County is prepared to hire additional GC/CM support or amend existing contracts to supplement areas that are insufficient. This project is an extremely large and complex project and change can be expected. The County has the financial capacity to hire additional resources as needed.

  The Sewer Utility will be hiring a Construction Management (CM) Firm with GC/CM experience to facilitate in the construction management of the project. The CM Firm will have experience in construction project management for the design and construction of wastewater facilities of similar size and complexity. The County will be preparing an RFP to select a firm that has GC/CM experience and staff available to support this effort. Arnie Sheppard will provide some support to this firm to ensure they understand County processes and procedures. He will also be available to assist if larger questions arise.

  As noted within this application, the Sewer Utility has assembled a team of design and other supporting consultants for this Project. These consultants include Brown and Caldwell (engineer) and Landon Project Management Group in association with Jacobs (GC/CM consultant). These consultants are leading experts in their specific fields of practice and are also very experienced in Washington State GC/CM procurement/contracting and project delivery.

- (F) If the project manager is interim until your organization has employed staff or hired a consultant as the project manager. Indicate whether sufficient funds are available for this purpose and how long it is anticipated the interim project manager will serve

  Not applicable. Project Manager has been selected.

- (G) A brief summary of the construction experience of your organization's project management team that is relevant to the project.

  Attachment C summarizes the Utility's relevant construction history for our staff assigned to the Project and Attachment B for our consultants' construction history on similar projects.

- (H) A description of the controls your organization will have in place to ensure that the project is adequately managed.

  The Sewer Utility has developed and implemented management tools and practices to control scope, schedule, and budget throughout preliminary engineering, final engineering, procurement, construction, and start-up and testing.

  These project controls are governed by guidelines, policies, and procedures established by the Pierce County Public Works and Utilities Project Delivery Manual and supplemented with the Pierce County Sewer Utility Project Delivery Manual. Consistent application of these procedures and standard practices ensure that the following objectives are met:
  - Maintain clear, accessible and accurate information on cost, schedule, and scope on projects.
  - Develop and provide appropriate performance measures for cost, schedule and scope for management. These performance measures allow management to better evaluate project progress and to make more effective decisions.
  - Manage risk more effectively through the development of a risk matrix.
  - Manage all change to the project more effectively through the use of the Sewer Utility Change Management process.

  Pierce County Budget and Finance provides controls for all contracts within the County. This system allows for tracking and documenting the proper management of all contracts.

- (I) A brief description of your planned GC/CM procurement process.

  Darlene Septelka will lead the GC/CM selection process for the Sewer Utility and coordinate the process with Pierce County's Contract Compliance Department and John Salmon, the Deputy Prosecuting Attorney for Pierce County. Darlene is currently under contract with the Sewer Utility and the Project Team has started drafting the procurement and contract documents. Upon PRC approval the County will publicly advertise the Request for Qualifications and Proposals (RFQ/P). The selection process will include initial proposals that focus on the proposer's qualifications and project approach, interviews of qualified firms, and then final proposals for percent fee and specified general conditions work. The firm with the highest total score from the scoring of proposals, interview and final proposal will be selected to provide preconstruction services and participate in MACC negotiations. In the unlikely event of a tie, the firm with the lowest proposal price will be selected. The GC/CM Selection Process is summarized below with estimated target dates:

Table X: GC/CM Selection Process and Estimated Schedule

GC/CM Selection Process Phase	Target Date
PRC GC/CM Project Approval	**March 24, 2011**
Step1: Request for Qualifications and Proposals (RFQ/P)	
Public Announcement for RFQ/P	April 19, 2011
Statement of Qualifications and Proposal (SOQ/P) Development Period	April 19 – May 17, 2011 (4 weeks)
Pre-Proposal Conference	April 26, 2011
SOQ/Ps Due	May 17, 2011
Evaluate SOQ/Ps and Shortlist Proposers Period	May 18 – June 1, 2011 (2 weeks)
Notification to Proposers Selected to Interview and Issue Interview Instructions	June 2, 2011
Interviews & Evaluation Period (County may shortlist the proposers after the interview before advancing to step 2)	June 3 – 16, 2011 (2 weeks)
Step 2: Request for Final Proposal (RFFP)	
Issue RFFP to the Selected Finalist	June 16, 2011
Final Proposal Development Period	June 16 – 30, 2011 (2 weeks)
Final Proposal/Sealed Bids Due	July 1, 2011
Selection Panel Announces Scores and Opens Final Proposal/Sealed Bids - Determine Apparent Winning Firm	July 1, 2011
Negotiations & Award	
Negotiate the Preconstruction Services Scope and Contract with the Selected Firm	July 1 – July 22, 2011 (3 weeks)
County Approval of the Preconstruction Services Contract	July 22 – August 19, 2011 (4 weeks)
Preconstruction Services Notice to Proceed Issued	August 19, 2011
MACC will be negotiated at 90% Construction Documents, possible early MACC package and phased construction	TBD with assistance by GC/CM Contractor

- (J) Verification that your organization has already developed (or provide your plan to develop) specific GC/CM contract terms.

  Darlene Septelka will lead the Project Team in the development of the GC/CM contract terms and conditions along with legal review and assistance from John Salmon, the Deputy Prosecuting Attorney for Pierce County. Darlene and John have both previously drafted GC/CM contracts for public agencies for projects administered under RCW 39.10. The GC/CM contract for the Chambers Creek Expansion project will model GC/CM contracts utilized on other WA State projects revised to align with Pierce County codes and contracting procedures to addresses the requirements specific to the Chambers Creek project and RCW 39.10. Development of the draft GC/CM General Condition, Pre-construction Agreement, and GC/CM Construction Contract is currently underway.

8. Public Body (your organization) Construction History:

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided: *(See Attachment E)*

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

See construction history (Attachment D).

9. Preliminary Concepts, sketches or plans depicting the project

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. Some examples are included in attachments E1 thru E6. At a minimum, please try to include the following:

- A overview site plan (indicating existing structure and new structures)
- Plan or section views which show existing vs. renovation plans particularly for areas that will remain occupied during construction.

Note: applicant may utilize photos to further depict project issues during their presentation to the PRC.

See site layout (Attachment E).

10. Resolution of Audit Findings on Previous Public Works Projects

If your organization had audit findings on any project identified in your response to Question 8, please specify the project, briefly state those findings, and describe how your organization resolved them.

There are no audit findings for projects identified in Question 8.

Caution to Applicants

The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria to be approved.

Signature of Authorized Representative

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit the information requested by the PRC. . You agree to submit this information in a timely manner and understand that failure to do so shall render your application incomplete.

Should the PRC approve your request to use the GC/CM contracting procedure, you also understand that: (1) your organization is required to participate in brief, state-sponsored surveys at the beginning and the end of your approved project; and (2) the data collected in these surveys will be used in a study by the state to evaluate the effectiveness of the GC/CM process. You also agree that your organization will complete these surveys within the time required by CPARB.

I have carefully reviewed the information provided and attest that this is complete, correct, and true application.

Signature: Tim Ramsaur

Name (please print) TIM RAMSAUR

Title: Wastewater Utility Manager

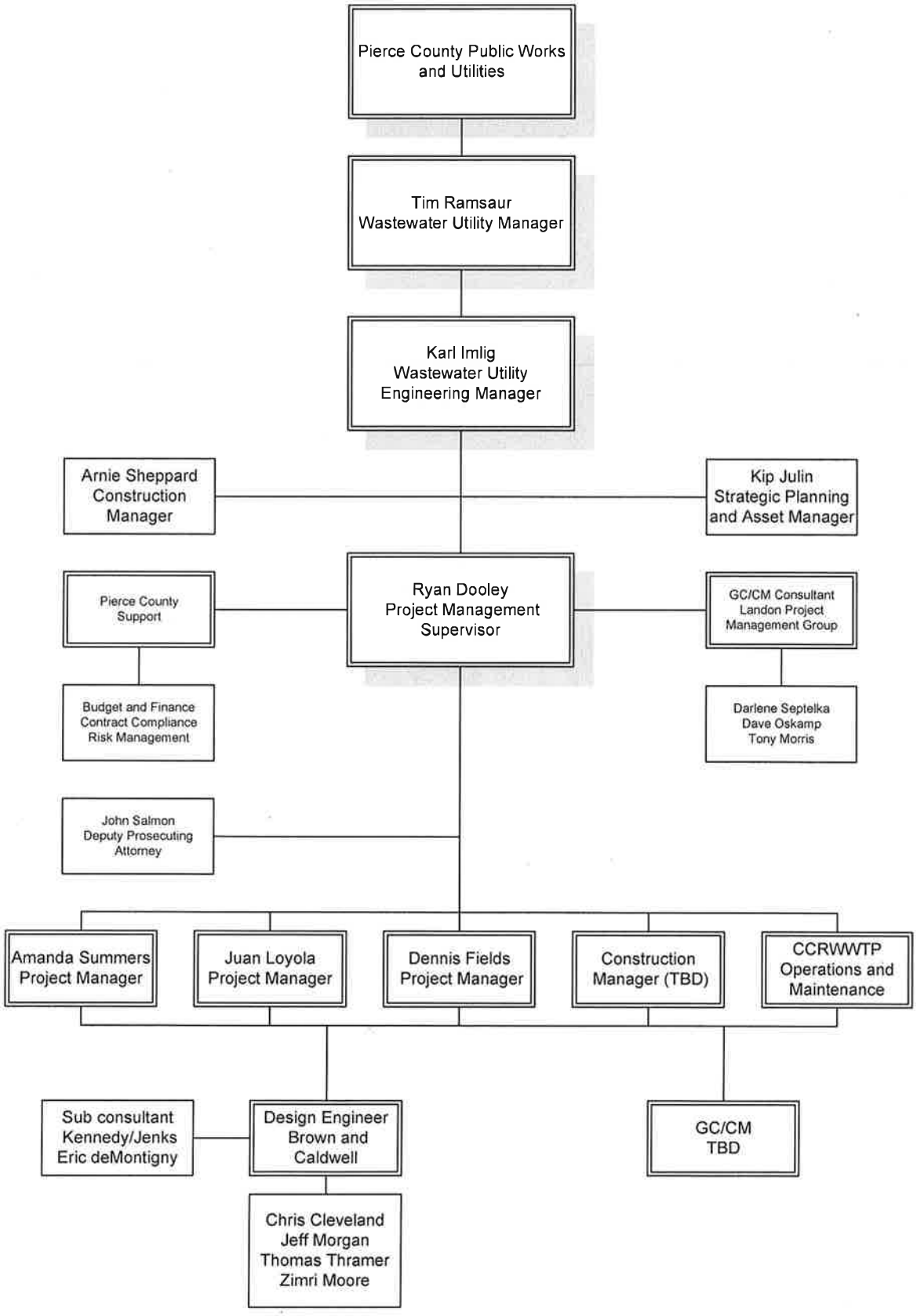
Date: 3-1-11

CPARB APPLICATION

ATTACHMENTS

Attachment A

Project Organizational Chart



Project Team Members Level of Involvement

Individual	GC/CM Procurement and Contracts	Preconstruction Phase	Construction Phase
Tim Ramsaur	10%	10%	10%
Karl Imlig	20%	20%	20%
Kip Julin	5%	5%	5%
Ryan Dooley	100%	100%	100%
John Salmon	5%	5%	5%
Amanda Summers	100%	100%	100%
Juan Loyola	100%	100%	100%
Dennis Fields	100%	100%	100%
Arnie Sheppard	5%	5%	5%
Darlene Septelka (LPMG)	75%	14%	14%
Dave Oskamp (LPMG)	5%	5%	5%
Tony Morris (Jacobs Con.)	5%	2.5%	2.5%
Chris Cleveland (B&C)		30%	5%
Jeff Morgan (B&C)		100%	75%
Tom Thramer (B&C)		20%	5%
Zimri Moore (B&C)		100%	75%
Eric deMontigny (K&J)		100%	50%

Chambers Creek Project Team's Experience and Role on Previous WA GC/CM Projects or Equivalent Experience

						Role During Project Phases					
	Name	***Summary of Experience***	***Project Names***	***Project Size***	***Project Delivery Type***	***Planning***	***Design***	***Construction***	***Commissioning, Startup, Closeout***	***Role Start***	***Role Finish***
1	Darlene Septelka, DBIA, Landon Project Management Group	Senior PM; 38 yrs of construction experience - 20 yrs assisting public and private owner in managing design & construction project to include 9 yrs managing WA public works projects. Direct project experience working as the public and private owner, contractor, designer, and consultant on over 100 domestic and international projects ranging up to $500M.	Windermere CSO Reduction Project - Seattle Public Utilities	$35M	WA GC/CM		PROC / ADV			Oct-11	On-going
			City of Lynnwood Recreation Center Renovation and Expansion Project	$25M	WA GC/CM	PROC	PM	PM	PM	Apr-09	Mar-11
			Lake Chelan Community Hospital Replacement Project	$45M	WA GC/CM	PROC				Dec-08	May-09
			Brightwater Treatment Plant Project - King County	$500M	WA GC/CM		OCM	OCM		Nov-05	Oct-07
			Port of Seattle Escalator Modernization Project	$35M	WA DB	PROC	ADV			Jan-10	On-going
			Thurston County Moderate Risk Waste Facility Project	$1.5M	WA DB	PROC	ADV	ADV		Jul-09	Dec-10
			Sound Transit East Link Track Bridge Prototype Project	$25M	WA Best Value R&D	PROC				Apr-10	Sep-10
2	Dave Oskamp, Landon Project Management Group	Senior CM; 36 yrs experience - 8 yrs assisting public and private owners in managing their projects and 28 yrs working as the general contractor on over 100 domestic and international projects ranging up to $250M.	City of Lynnwood Recreation Center Renovation and Expansion Project	$25M	WA GC/CM			CM	CM	Apr-10	Mar-11
			Renton Sewage Plant - Phase V, Renton, WA	$2.5M	DBB			CON	CON	Feb-85	May-87
3	Tony Morris, PMP, Jacobs	Senior PM; 28 yrs experience in program and project management, project controls, and construction management for both public and private sector projects; and has worked for both owners and consultants.	Port of Seattle Rental Car Facility	$419M	WA GC/CM		CTR	CTR		Mar-09	On-going
			Brightwater Treatment Plant - King County	$200M	WA GC/CM		CTR	CTR		Sep-05	Oct-06
			West Point Treatment Plant Secondary Expansion Program	$543M	DBB	OCTR	OCTR	OCTR	OCTR	Nov-89	Jun-96

PROJECT DELIVERY TYPE KEY

WA DB	WA State Design-Build project administered under RCW 39.10.
PU DB	A public/federal Design-Build project
PR DB	A Design-Build project for a private owner
WA GC/CM	WA State GC/CM project administered under RCW 39.10.
OR CM/GC	OR State CM/GC project
PU CM@R	A public/federal CM at Risk project
PR CM@R	A CM at Risk project for a private owner
DBB	Public or Private Design-Bid-Build project

INDIVIDUAL ROLE KEY

As the Public Body:

OEX	The executive or manager for the Owner responsible for the project
OPM	The Owner's Project Manager
ODM	The Owner's Design Manager
OCM	The Owner's Construction Manager
OENG	As the Owner acting as the resident engineer or field engineer
OREP	The Owner's Representative
OPROC	The Owner's Procurement Manager or Attorney
OCTR	Provided project controls, scheduling, or estimating support to the project as the Owner

As a Prime Consultant or Prime Contractor providing service to the Public Body:

PROC	A prime consultant providing procurement services
ADV	A prime consultant providing project advisory, oversight, or audit services
PM	A prime consultant providing project management services
CTR	A prime consultant providing project controls, scheduling, or estimating services
DES	Designer of Record or prime consultant providing design services
CM	A prime consultant providing construction management, resident engineering, or field engineering services
CON	The prime contractor responsible for building the project
PRECON	The prime contractor responsible for preconstruction services

As a Subconsultant or Subcontractor to a Prime:

SUBPROC	A subconsultant providing procurement services
SUBADV	A subconsultant providing contract advisory, oversight, or audit services
SUBPM	A subconsultant providing project management services
SUBCTR	A subconsultant providing project controls, scheduling, or estimating services
SUBDES	A subconsultant providing design or engineering services
SUBCM	A subconsultant providing construction management, resident engineering, or field engineering services
SUBCON	A subcontractor to the prime on the project

Brown and Caldwell: Experience and Role on Previous WA GC/CM Projects or Equivalent Experience

	Name	Summary of Experience	Project Names	Project Size	Project Delivery Type	Role During Project Phases: Planning	Design	Construction	Commissioning, Startup, Closeout	Role Start	Role Finish
1	Chris Cleveland	25 years of experience; Municipal design, project and program management for wastewater facilities	Chambers Creek Regional Wastewater Treatment Plant Upgrade	190M	N/A	PM	PM			Dec-07	Jun-11
			Chambers Creek Regional Wastewater Treatment Plant Headworks Improvements	10M	DBB	PM	PM	ADV	ADV	Oct-07	Jun-09
			King County South Plant Enlargement III, Renton WA	150M	DBB	DES	DES	CM		Oct-90	Jun-96
			LOTT Hawks Prairie Satellite Facilities, Olympia WA	50M	DBB	PM	PM	PM	PM	Jan-01	Dec-06
			Chambers Creek Regional Wastewater Treatment Plant Fertilizer Manufacturing Facility	15M	DBB	PM	PM	PM	PM	Dec-00	Mar-07
			LOTT Budd Inlet Treatment Plant Process Improvements Program Management, Olympia, WA	40M	DBB / WA GC/CM	PM	PROC / ADV			Aug-06	Mar-10
2	Jeff Morgan	24 years of experience, progressively more complex municipal wastewater projects	Chambers Creek Regional Wastewater Treatment Plant Upgrade	190M	N/A	DES				Dec-09	Jun-11
			Chambers Creek Regional Wastewater Treatment Plant Headworks Improvements	10M	DBB			CM	CM	Oct-07	Jun-09
			Shelton Regional Wastewater Plan	20M	DBB	PM	PM			Nov-03	Jul-07
			City of Tacoma Central Treatment Plant Upgrade	80M	WA DB	DES				Oct-00	Jun-02
			LOTT WWTP Upgrade	25M	DBB		DES	CM	CM	Jan-91	Sep-94
3	Tom Thramer	31 Years of Industrial and Municipal Design and PM experience	Chambers Creek Regional Wastewater Treatment Plant Upgrade	190M	N/A	DES				Dec-09	Jun-11
			Brightwater Treatment Plant King County Woodinville, WA	500M	WA GC/CM and DBB		DM			Oct-03	Mar-07

			Chemicon Facility Expansion Moses Lake, WA	40M	DB	PM	PM	Design PM	Design PM	Nov-00	Apr-02
			Potlatch Corporation Lime Kiln Precipitator Lewiston, ID	11M	DBB	PM	PM			Nov-99	Oct-00
			Univar USA Chemical Distribution Facility Commerce, CA	42M	DBB	PM	PM	PM	PM	Oct-98	Apr-00
4	Zimri Moore	23 Years of Municipal Design, Construction Management Support, and PM experience	Chambers Creek Regional Wastewater Treatment Plant Upgrade	190M	N/A	DES				Dec-09	Jun-11
			Brightwater Treatment Plant King County Woodinville, WA	475M	WA GC/CM and DBB		DM	PM	PM	Oct-03	Aug-11
			South Plant Enlargement III, King County Renton, WA	150M	DBB		PE	PE	PE	May-96	Jan-01
			Chambers Creek Regional Wastewater Treatment Plant Upgrade	8M	DBB		PM	PM		Nov-01	Oct-03
			Budd Inlet Reclaimed Water Production Facilities , LOTT Olympia, WA	22M	DBB	PM	PM	PM	PM	Oct-98	Jan-03
5	Eric deMontigny	Senior PM; 27 yrs experience, progressively more complex projects.	Chambers Creek Regional Wastewater Treatment Plant Upgrade	190M	N/A	SUBDES				Dec-09	May-11
			Bulltrack Watts NAS Whidbey Waterline Replacement	11M	PU DB		SUBDES	SUBDES		Oct-09	Aug-10
			City of Arlington, WWTP Upgrade and Expansion	35M	DBB		DES	DES, CM		May-07	Jul-10
			City of Fillmore, CA Water Recycling Facility	43M	PU DB		SUBDES	SUBCM	SUBCM	Nov-06	Jul-09
			City of Quincy, WA Domestic Water Reclamation Plant and Industrial WWTP (multiple projects)	20M	WA DB		DES, CON	DES, CON	CON	May-01	May-05
			Thurston County Grand Mound WWTP and Water Facilities	7M	DBB			CM	CM	Nov-97	Jan-99
			Lockheed Martin Burbank, CA Vapor Extraction System	20M	PR CM@R			CM	CM	Mar-96	Nov-97
			TCE Remedial Actions, Norton AFB, San Bernardino, CA. US Dept of the Air Force	7M	PU DB		DES	CM	CM	Mar-94	Jan-96

Pierce County: Experience and Role on Previous WA GC/CM Projects or Equivalent Experience

	Name	Summary of Experience	Project Names	Project Size	Project Delivery Type	Role During Project Phases: Planning	Design	Construction	Commissioning, Startup, Closeout	Role Start	Role Finish
1	Karl Imlig, P.E.	Karl has over 21 years experience in the public and private sectors as a design and construction manager, city engineer, designer, and project manager.	City of Olympia City Hall	$42M	WA DB	OPM					
2	John Salmon, Attorney	Has over 15 years preparing and reviewing legal documentation and providing advice on civil matters relating to construction and eminent domain issues. For GC/CM Projects prepared front end legal documentation.	ELSB Vancouver		WA GCCM		OPROC			Jul-97	Oct-99
			Scholars Hall		WA GCCM		OPROC			Jan-99	Feb-00
			Spokane Health Sciences Building		WA GCCM		OPROC			Jul-97	Sep-99
			Student Recreation Center		WA GCCM		OPROC	OPROC		Jul-97	Jan-99
			Teaching and Learning Center		WA GCCM		OPROC			Jul-97	Jun-99

PROJECT DELIVERY TYPE KEY

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PR DB	A Design-Build project for a private owner
WA GC/CM	WA State GC/CM project administered under RCW 39.10.
OR CM/GC	OR State CM/GC project
PU CM@R	A public/federal CM at Risk project
PR CM@R	A CM at Risk project for a private owner
DBB	Public or Private Design-Bid-Build project

INDIVIDUAL ROLE KEY

As the Public Body:

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OPM	The Owner's Project Manager
ODM	The Owner's Design Manager
OCM	The Owner's Construction Manager
OENG	As the Owner acting as the resident engineer or field engineer
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OPROC	The Owner's Procurement Manager or Attorney
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PM	A prime consultant providing project management services
CTR	A prime consultant providing project controls, scheduling, or estimating services
DES	Designer of Record or prime consultant providing design services
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PRECON	The prime contractor responsible for preconstruction services

As a Subconsultant or Subcontractor to a Prime:

SUBPROC	A subconsultant providing procurement services
SUBADV	A subconsultant providing contract advisory, oversight, or audit services
SUBPM	A subconsultant providing project management services
SUBCTR	A subconsultant providing project controls, scheduling, or estimating services
SUBDES	A subconsultant providing design or engineering services
SUBCM	A subconsultant providing construction management, resident engineering, or field engineering services
SUBCON	A subcontractor to the prime on the project

Chambers Creek Project Team's Construction Experience

	Name	Summary of Experience	Project Names	Project Size	Project Delivery Type	Role During Project Phases: Planning	Design	Construction	Commissioning, Startup, Closeout	Role Start	Role Finish
1	Arnie Sheppard, P.E.	CM: 26 years of progressive experience in engineering and construction management for the public sector. He has worked for the Pierce County Public Works & Utilities department for the past 22 years and has been a construction project manager for the past 8 years.	Fertilizer Manufacturing Facility	$7,193,600	DBB			OCM	OCM	Jul-04	Oct-06
			CCRWWTP North End SCADA Upgrade Project	$1,503,332	DBB			OCM	OCM	Nov-04	Sep-05
			Chambers Creek Tunnel Rehabilitation Project, Phase 1, Rebid	$2,492,851	DBB			OCM	OCM	Jun-05	Jun-06
			Tahoma Vista Community System Tie-In	$460,083	DBB			OCM	OCM	Aug-05	Feb-06
			118th Ave Ct E Sanitary Sewer Project (Chardonnay)	$232,436	DBB			OCM	OCM	Aug-05	Apr-06
			WWTP Maintenance Facility	$2,037,738	DBB			OCM	OCM	Apr-06	Jan-07
			Phillips Siphon Valve Containment Structure	$469,532	DBB			OCM	OCM	Jun-06	Dec-06
			WWTP Headworks Project	$8,654,126	DBB			OCM	OCM	Feb-07	Mar-09
			Oakbrook SideSewer Repairs	$315,854	DBB			OCM	OCM	Nov-08	Dec-08
			WWTP Project Group A - Silt Removal	$750,719	DBB			OCM	OCM	Aug-09	Nov-09
			Lakewood Generators Replacement -Phase 2	$354,578	DBB			OCM	OCM	Aug-09	Jun-10
			Chambers Creek Tunnel Rehabilitation Phase 2 (rebid)	$10,838,082	DBB			OCM	OCM	Sep-09	On-going
			WWTP Project Group A - Site Perimeter Improvements	$11,206,070	DBB			OCM	OCM	Jun-10	On-going
			"B" Street Interceptor Phase 2	$3,534,312	DBB			OCM	OCM	Sep-10	On-going
2	Juan Loyola, P.E.	PM; 13 yrs experience in project management, project controls, and construction management for public sector projects	SR 509 - Port of Tacoma Rd - Grade Separation	$22,895,562	DBB			OENG/OCTR		Mar-00	Mar-02
			I-5 - 84th Street to Fife Interchange Ramps	$1,088,750	DBB			OENG/OCTR		Apr-02	Oct-02
			SR 16 - 6th Ave. to Jackson Ave - HOV	$4,040,160	DBB		DES	OENG/OCTR	OCTR	Dec-02	Dec-04
			Firgrove Regional Detention Pond and Pipeline	$2,899,221	DBB		DES	OENG/OCTR	OCTR	Feb-05	Oct-07
3	Ryan Dooley, P.E., P.M.P.	PM; 13 yrs experience, the last 8 years in project management for public sector projects	ESB Irrigation & Pump Station Project	$164,619	DBB		DES				Oct-03
			Rainier Meadows Interceptor Project	$553,914	DBB		DES	OCTR			Oct-04
			Tahoma Vista Community System Tie-In	$460,083	DBB		DES	OCTR			Feb-06

			Phillips Siphon Valve Containment	$469,083	DBB		DES	OCTR			Jun-06
			WWTP Headworks Modifications	$187,173	DBB		DES				Ongoing
			Chambers Creek Tunnel Rehabilitation Project Phase 1	$3,786,703	DBB		DES				Jun-05
			WWTP Expansion - Site Perimeter Improvements	$11,206,070	DBB		ODM				Ongoing
			WWTP Expansion - Silt Removal	$750,719	DBB		ODM				Aug-09

PROJECT DELIVERY TYPE KEY

WA DB	WA State Design-Build project administered under RCW 39.10.
PU DB	A public/federal Design-Build project
PR DB	A Design-Build project for a private owner
WA GC/CM	WA State GC/CM project administered under RCW 39.10.
OR CM/GC	OR State CM/GC project
PU CM@R	A public/federal CM at Risk project
PR CM@R	A CM at Risk project for a private owner
DBB	Public or Private Design-Bid-Build project

INDIVIDUAL ROLE KEY

As the Public Body:

OEX	The executive or manager for the Owner responsible for the project
OPM	The Owner's Project Manager
ODM	The Owner's Design Manager
OCM	The Owner's Construction Manager
OENG	As the Owner acting as the resident engineer or field engineer
OREP	The Owner's Representative
OPROC	The Owner's Procurement Manager or Attorney
OCTR	Provided project controls, scheduling, or estimating support to the project as the Owner

As a Prime Consultant or Prime Contractor providing service to the Public Body:

PROC	A prime consultant providing procurement services
ADV	A prime consultant providing project advisory, oversight, or audit services
PM	A prime consultant providing project management services
CTR	A prime consultant providing project controls, scheduling, or estimating services
DES	Designer of Record or prime consultant providing design services
CM	A prime consultant providing construction management, resident engineering, or field engineering services
CON	The prime contractor responsible for building the project
PRECON	The prime contractor responsible for preconstruction services

As a Subconsultant or Subcontractor to a Prime:

SUBPROC	A subconsultant providing procurement services
SUBADV	A subconsultant providing contract advisory, oversight, or audit services
SUBPM	A subconsultant providing project management services
SUBCTR	A subconsultant providing project controls, scheduling, or estimating services
SUBDES	A subconsultant providing design or engineering services
SUBCM	A subconsultant providing construction management, resident engineering, or field engineering services
SUBCON	A subcontractor to the prime on the project

Project #	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actual Budget	Reason for Budget or Schedule Overturn
99-9397 99-10132 99-10640	Northwest Landing ULID 90-4	Construction of a 5.3 MGD pump station, ~55,000 feet of force main, and ~13,000 feet of gravity interceptor	Design Bid Build	Jul-98	Aug-00	Jul-98	Oct-00	$17,176,000	$17,030,051	Construction took longer than anticipated because of site conditions.
00-11869	CCWWTP Digester Upgrade Project	Construction of cast in place covers for three digesters and removal of existing floating covers.	Design Bid Build	Sep-00	Nov-02	Sep-00	Mar-03	$4,860,000	$5,731,641	Bids came in higher than expected. During construction the primary digester failed. The utility added work to convert another digester to be capable of working as a primary digester.
00-12112	Environmental Services Office Building	Construction of a 50,000 sqft office building.	Design Bid Build	Dec-00	Apr-02	Dec-00	May-02	$12,000,000	$12,626,410	Construction of mitigation (fields and restrooms) were added to this project, this increased the construction time and cost of the project.
01-12608	176th Street East Interceptor, Phase I	Construction of 4,600 feet of 21" diameter gravity sewer.	Design Bid Build	May-01	Sep-01	May-01	Sep-01	$2,200,000	$1,530,081	
01-13334	Ultra Violet Disinfection System Project	Converting WWTP effluent disinfection from Chlorine to UltraViolet	Design Bid Build	Oct-01	Dec-02	Oct-01	Dec-02	$2,650,000	$2,634,879	
02-13761	Spanaway Loop Bypass Interceptor - Schedule C	6,400 feet of 72" diameter gravity sewer pipe.	Design Bid Build	Jun-02	Sep-03	Jun-02	Nov-04	$12,200,000	$16,833,740	Budget and construction time based on microtunneling which was tried by the contractor but could not be accomplished. A change order in excess of $4,000,000 was done for open trench construction. This also added to the construction time.
02-13871	Sewer Collections Maintenance Facility	Construct a 7,700 sqft office building.	Design Bid Build	Apr-02	Dec-02	Apr-02	Apr-03	$2,700,000	$3,012,781	Sales tax increase and modifications to plans caused cost and time increases.
02-14257	Canyon Road Interceptor Phase 2	Construction of 13,900 feet of 18" gravity sewer.	Design Bid Build	Sep-02	Jun-03	Sep-02	Aug-03	$5,100,000	$4,458,483	Bids came in lower than expected. Differing soil conditions caused construction delays.
03-14992	Chambers Creek Regional Treatment Plant Aeration Basins Selector Upgrade Project	Upgrade and modification of existing aeration basins.	Design Bid Build	Apr-03	May-04	Apr-03	May-04	$2,500,000	$2,447,043	
04-30776	Fredrickson Trunk Sanitary Sewer Project	Install 22,000 feet of 54" diameter sewer.	Design Bid Build	Apr-04	Nov-04	Apr-04	Nov-04	$2,100,000	$1,772,258	

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Project #	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actual Budget	Reason for Budget or Schedule Overturn
04-35897	Fertilizer Manufacturing Facility	Construction of a Facility to make Grade A fertilizer out of biosolids.	Design Bid Build	Jul-04	Oct-05	Jul-04	Oct-06	$4,500,000	$7,193,600	Bid was based on specifications of a like proprietary system that was being furnished by the owner. Because of differences between these specs and the actual supplied equipment the contractor had to make many changes and fixes to piping, the building, foundations, and other work. This caused the large increase in price and time.
04-41177	CCRWWTP North End SCADA Upgrade Project	Replacement and upgrade of existing SCADA equipment and software	Design Bid Build	Nov-04	Sep-05	Nov-04	Sep-05	$1,280,000	$1,503,332	Bids came in higher than expected. Fire Marshal required changes to the contract documents after bid.
05-51801	Chambers Creek Tunnel Rehabilitation Project, Phase 1, Rebid	Lining of an existing 72" diameter RCP sewer.	Design Bid Build	Jun-05	Dec-05	Jun-05	Jun-06	$2,510,000	$2,492,851	Contractor failed to complete work in low flow window. Project extended into the next low flow window.
05-52195	Chambers Bay Golf Course Construction	Build an 18-hole Golf Course, Club house, and starter shack.	Design Bid Build	Sep-05	Oct-06	Sep-05	May-07	$16,000,000	$18,163,203	Bids came in higher than expected and contractor was retained for the 1 year grass "grow in" phase for support.
06-52804	WWTP Maintenance Facility	Build a building to house sewer maintenance and golf course staff	Design Bid Build	Apr-06	Dec-06	Apr-06	Jan-07	$2,000,000	$2,037,738	Field modifications added to cost and construction time.
06-53551	WWTP Headworks Project	Extensive rehab and expansion of the WWTP headworks.	Design Bid Build	Feb-07	Sep-08	Feb-07	Mar-09	$12,000,000	$8,654,126	Differing Conditions and weather related issues caused the construction delay.
07-58922	Chambers Creek Central and North Meadows	Gravel mine remediation into park-like features.	Design Bid Build	May-07	Dec-07	May-07	Apr-08	$3,150,000	$2,994,871	Found unsuitable soil conditions during grading that caused the construction delay.
08-65314	WWTP Heating and Hot Water Systems Upgrade	Replacement of aging hot water boilers.	Design Bid Build	May-08	Mar-09	May-08	Sep-09	$1,701,836	$1,770,104	Because of unclear plans time and cost were added to the contract.
09-71829	WWTP Project Group A - Silt Removal	Removal of silt from WWTP site.	Design Bid Build	Sep-09	Nov-09	Aug-09	Nov-09	$2,135,517	$750,719	
09-71891	North Dock Overpass	Construction of a footbridge over BNSF right-of-way.	Design Bid Build	Mar-09	Aug-10	Aug-09	**	$2,933,027	**	Project is behind schedule due to delays in material delivery but is on budget.
09-72048	Chambers Creek Tunnel Rehabilitation Phase 2 (rebid)	Lining of an existing 72" diameter RCP sewer.	Design Bid Build	Aug-09	May-11	Sep-09	**	$10,838,082	**	Because of delays in FRP liner delivery the contract is behind schedule. Contract is on budget but claims are pending.

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Project #	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actual Budget	Reason for Budget or Schedule Overturn
10-77501	WWTP SCADA Upgrade	Replacement and upgrade of existing SCADA equipment and software	Design Bid Build	Sep-09	Nov-10	Jan-10	**	$500,000	**	Bids came in lower than expected but project has taken longer than expected.
10-77939	WWTP Project Group A - Site Perimeter Improvements	Grading, stormwater, road, and utility work needed for the WWTP Expansion	Design Bid Build	Jun-10	Oct-11	Jun-10	**	$11,206,070	**	Bids came in lower than expected. Some change orders have been issued for different site conditions but contract is on schedule and on budget.
10-78247	"B" Street Interceptor Phase 2	Construct 5,000 feet of 36" and 30" diameter gravity sewer.	Design Bid Build	Sep-10	Oct-11	Sep-10	**	$3,534,312	**	Bids came in higher than expected. Contractor has encountered large volumes of ground water and is behind schedule.
10-78244	WWTP Headworks Modifications	Modify existing conveyors.	Design Bid Build	May-10	Sep-10	Sep-10	**	$228,000	**	Engineering took longer than expected.
Various	Miscellaneous Projects under $1,000,000	Summary of 9 projects over the past 6 years	Design Bid Build	-	-	-	-	$2,972,600	$2,770,391	

CRP 5404/5433	Canyon Road East-144th St E to 116th St E	Reconstruction of 9,000 lf of Canyon, 101 LF of 141st, 130 LF of 140th, 107 lf of 138th St E, and 625 lf of 136th St.	DBB	Jul-06	Jan-10	Jul-06	Jan-10	$13,859,343	$15,024,741	Roadway Excavation & Embankment compaction due to unsuitable soil and Escalating HMA costs.
CRP 5762	176th Street East	Improvement of approx 2.3 miles of 176th St E from 1000' E of Canyon Road E to Gem Heights Drive E	DBB	Oct-09	Contract managed by working days	Oct-09	In Progress	$9,036,969	In Progress	Project Currently on schedule and budget
CRP 5537	176th St Waller Rd East to 51 Ave East	Improvement of approx. 1.41 miles of 176th St E from Waller Road E to 51 Avenue E	DBB	Sep-10	Contract managed by working days	Sep-10	In Progress	$7,682,801	In Progress	Project Currently on schedule and budget
CRP 5660	Stewart Road Roadway Improvements	Improvement of Stewart Road from the E side of the Stuck River to Lake Tapps Parkway E by widening Stewart Road from two lanes to five lanes	DBB	Jul-09	Contract managed by working days	Jul-09	In Progress	$4,814,818	In Progress	Project Currently on schedule and budget
CRP 5532	94th Ave East - 136th St East to 116th St East	This work provides widening of approx 1.45 miles to 94th Ave E from 136th St E to 116th St E	DBB	May-08	Mar-10	May-08	Mar-10	$7,827,856	$7,396,768	This project was under budget

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Project #	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actual Budget	Reason for Budget or Schedule Overturn
CRP 5696	Wollochet Drive NW	Improvement and widening of approx. 1 mile of Wollochet Drive NW from 40th Street NW to E Bay Drive NW.	DBB	Jul-10	Contract managed by working days	Jul-10	In Progress	$6,560,760	In Progress	Project Currently on schedule and budget
CRP 5656	Canyon Road East	Improvement of approx .75 miles of Canyon Road from 172nd St E to 160th St E	DBB	Aug-10	Contract managed by working days	Aug-10	In Progress	$5,363,994	In Progress	Project Currently on schedule and budget
CRP 5683	Canyon Road East - 160th St East to 144th St East	reconstruction and widening of approx. 6,000 lf of Canyon Road	DBB	Jul-05	Jan-10	Jul-05	Jan-10	$7,852,830	$8,180,587	Additional safety issues lead to more Traffic Labor control and Message boards
	Tacoma Narrows	Tacoma Narrows Airport Runway Safety Improvement Area	DBB	Apr-08	Jul-10	May-08	Nov-10	$12,459,411	$16,228,283	This project was in progress when Pierce acquired the airport from the City of Tacoma. The project had a delayed start because it was not ready to go to bid when it did, which resulted in change orders and a delayed start while waiting for permits..This added to the project budget
	Pierce County Detention and Corrections Center	Construction of 194,000 sf. Corrections Center	GC/CM	Jan-00	Sep-02	May-00	Feb-04	$40,000,000	$43,285,863	MACC was negotiated in the early phase of the design, resulting in multiple change orders later in construction due to change conditions AND adding significantly to the project cost and project schedule
Prog. 6924	Christine Anderson II Ferry	Construction of a 54 Car Ferry	DBB	Aug-05	Dec-06	Aug-05	Jan-07	$ 11,176,000	$ 11,072,060	Minor Delay due to procurement of part, no liquidated damages assessed

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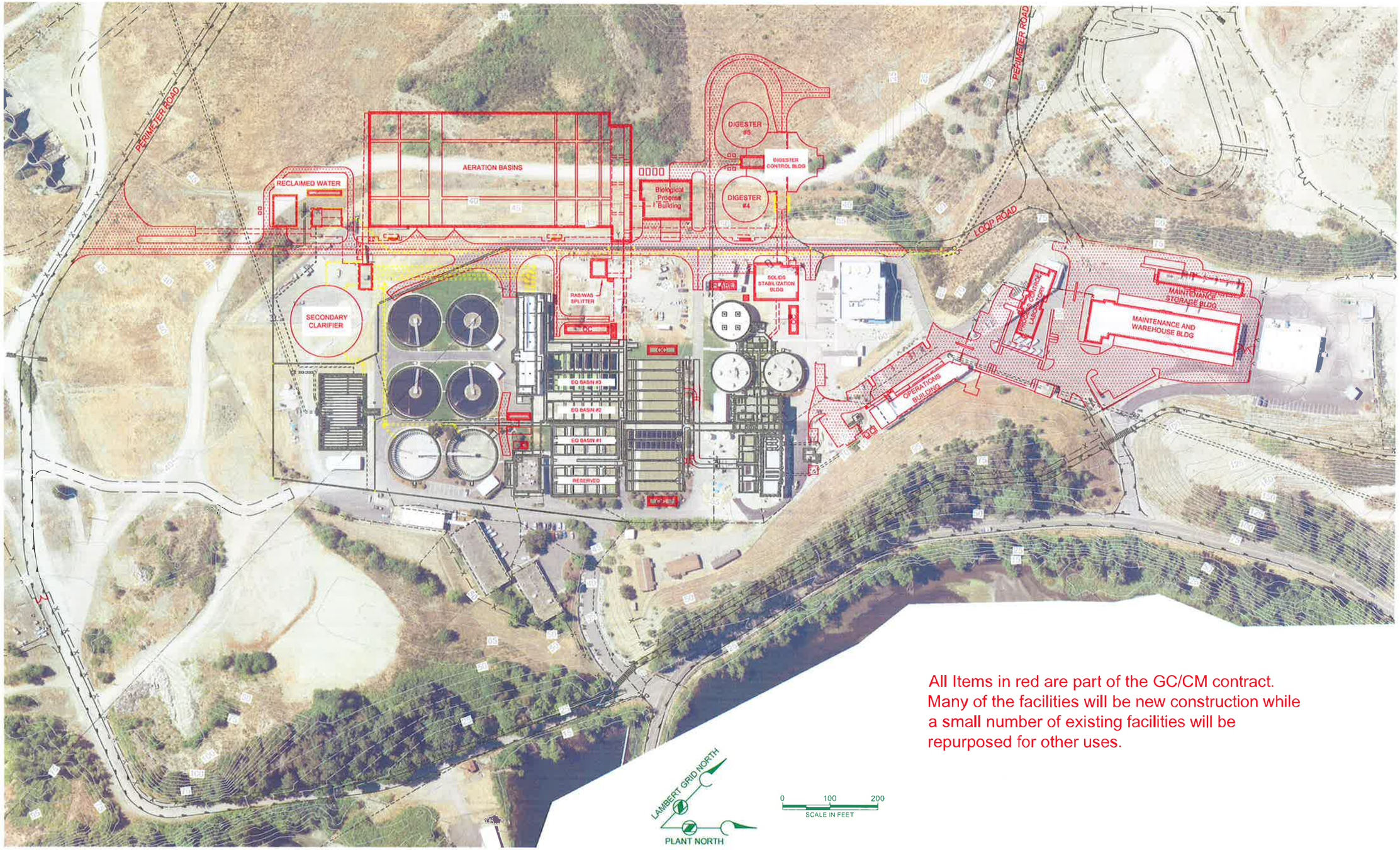

All Items in red are part of the GC/CM contract.
Many of the facilities will be new construction while a small number of existing facilities will be repurposed for other uses.

LINE IS 2 INCHES AT FULL SIZE (IF NOT 2" - SCALE ACCORDINGLY)

PIERCE COUNTY PUBLIC WORKS & UTILITIES DEPARTMENT
9850 – 64TH STREET WEST
UNIVERSITY PLACE, WASHINGTON 98467–1078
(253) 798–4050

DOCUMENT NO.:		DATE ISSUED :	
CAD FILENAME:	REVISION DATE:	LAST PLOT DATE:	REV:

PRELIMINARY

NO.	REVISION	DATE	APPD

DATE	SCALE
DESIGNED	CHECKED
DRAWN	APPROVED

CHAMBERS CREEK REGIONAL WASTEWATER TREATMENT PLANT
10511 Chambers Creek Road West UNIVERSITY PLACE, WASHINGTON 98467-1048

PHASE 1 – PRELIMINARY DESIGN

AREA

SHEET
35 of 35